



2019-IPR-D-000-012068

Crop yield forecasting in developing countries

Position for:

Trainee

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <http://www.jrc.ec.europa.eu>.

The vacancy is within the Food Security Unit of the Directorate for Sustainable Resources, which is based in Ispra (Italy). The Unit contributes scientific development towards a more effective and efficient management of EU policies related to agriculture and food security. The current open position is with the FOODSEC Group which deals with food and nutrition security analysis and policy support in food insecure countries globally.

Short description of activity:

The Food Security Unit has been developing and using CST (CGMS Statistical Tool), a standalone software for forecasting crop yields using yield indicators derived from crop models (in particular CGMS, the JRC Crop Growth Monitoring System), Earth Observation (EO), or meteo data.

The team recently received yield data at province level from a number of developing countries and would like to analyse the relationships between these yield data and a number of yield indicators (e.g. biomass indicators derived from EO data, rainfall estimates, meteo data or more sophisticated indices such as the water satisfaction index).

Within this framework, the trainee position would contribute to the statistical analysis of the relations between yield statistics and yield indicators using in particular the CST software.

	<p>The trainee may also have to analyse the indicator and yield data using any programming language (or the JRC SPIRITS software).</p> <p>Through this training, the trainee will learn how the Food Security unit monitors crop conditions worldwide and forecasts crop yield using remote sensing and meteo data.</p> <p><u>Qualifications:</u></p> <p><u>Essential:</u></p> <p>The trainee must have a University degree or near completion in agronomy, environmental sciences or related fields.</p> <p>Basic knowledge of statistics (linear regression) is required.</p> <p>Good knowledge of spoken and written English is essential.</p> <p><u>Advantage:</u></p> <p>Fluency with python or R programming language and basic knowledge of the SQL language would be a plus.</p> <p><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></p> <p>https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</p>
<p>Institute/Directorate Unit</p>	<p>Directorate D - Sustainable Resources, Food Security Unit FoodSec group</p> <p>Further information: http://mars.jrc.ec.europa.eu/mars/About-us/FOODSEC</p>
<p>Indicative duration</p> <p>Preferred starting date</p>	<p>5 months</p> <p>As soon as possible</p>
<p>JRC Site</p> <p>Country</p>	<p>Ispra</p> <p>Italy</p>
<p><u>JRC contact details</u></p>	<p>For any technical problems with your application, please contact: JRC-ESRA@ec.europa.eu</p>